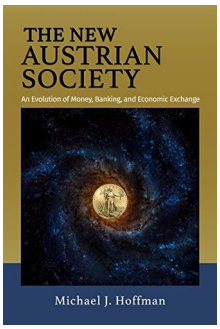

JE KINDLE-NOTITIES VOOR:

The New Austrian Society: An Evolution of Money, Banking, and Economic Exchange

door Michael Hoffman

Gratis directe Kindle-preview: https://a.co/76qhiDD

90 Highlights

Highlight (Geel) | Locatie 397

> The answer to the latter is that the introduction of new technologies and innovative capital equipment, through the accumulation of savings, creates an economic environment where old production methods within the capital structure are abandoned or reconfigured, changing the breadth and depth of this structure. New capital combinations and inputs allow for labor to become more productive per unit of time, rendering other production lines obsolete. This creative destruction, as Joseph Schumpeter described it, “incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one.”

Highlight (Geel) | Locatie 402

> While some capital goods are incontrovertible and cannot be salvaged with this process, the structure itself builds upon the foundation of the old one, increasing the amount of capital relative to the supply of labor. This increase in the capital-labor ratio increases real wages through an expansion of the supply of consumer goods in the economy. In what has been called the “Ricardo effect,” this accumulation of capital lengthens the capital structure so that more “roundabout” production methods are undertaken, increasing the earning ability of labor that utilizes these new capital goods.

Highlight (Geel) | Locatie 406

> The benefits of increased wealth and incomes heavily outweigh the destruction of old, less capitalistic production processes. It is true to say, then, that the invisible hand pushes the market toward creation and innovation while simultaneously wiping away outmoded techniques that can only inhibit this progress. In essence, real wages and wealth accumulation rise due to (1) the increase in economic output that supplies the market with a greater amount of consumer goods, lowering prices as nominal wage rates remain the same, and (2) the enhanced labor bettered through the introduction of new capital goods that possess improved technological capabilities, increasing the marginal productivity of labor and therefore nominal wages. Once this is understood, a particular economic order begins to emerge. This is where we can find the answer to the former question.

Highlight (Geel) | Locatie 412

> The invisible hand provides the creative destruction necessary to guide a kaleidic society toward a sort of spontaneous order in which the subjective desires of a populace, blissfully unaware of the economic progress

> inherent in their system of voluntary exchange, provide the necessary mechanism whereby a constellation of prices in constant flux directs the entrepreneurial spirit toward productive opportunities that satisfy these desires. It is the process of discovery within the division of disbursed knowledge that enables the entrepreneur to employ his superior alertness to detect unforeseen avenues for earning profits. But through this individualistic pursuit, the entrepreneur, through his own experiences and knack for dissecting price differentials in the capital structure, unintentionally serves the needs of individuals who communicate the information embedded within these prices to him. This interdependent web of knowledge and communication, known as the price mechanism, is expressed through a commonly understood denominator and widely accepted numeraire known as the medium of exchange.

Highlight (Geel) | Locatie 420

> Money is the only economic good in existence that consists of one-half of virtually every exchange in a complex monetary economy. A change in the supply of or demand for money can transform economic order into calculational chaos if market institutions do not evolve to account for this. For this reason, the spontaneous order can be injected with an alternative form of our kaleidoscopic metaphor: monetary kaleidics.

Highlight (Geel) | Locatie 473

> The financial system is one of the most important industries in the spontaneous order, but if monetary institutions do not enhance the ability of entrepreneurs to locate and extract the voluntary savings of society and allocate them to the correct investment in the higher-order stages of production, then this emergent order cannot prevent monetary disequilibrium from turning into a kaleidic nexus of calculational chaos. To achieve a true monetary order, kaleidic shifts must be met with a monetary mechanism that automatically counteracts the novelty of changes in the supply of and demand for money which can never be fully anticipated ex ante by everyday entrepreneurs within the capital structure. How, then, can such a monetary order emerge if entrepreneurs are unable to appraise the market for money as well as the specialized industries they occupy?

Highlight (Geel) | Locatie 520

> The central bank in the United States, the Federal Reserve, was created in 1913 to ameliorate bank panics and smooth the business cycle. Since its inception, it has failed to prevent the three greatest economic calamities in US history: the Great Depression, the stagflation of the 1970s, and the financial crisis of 2008. In fact, there is considerable evidence that the Federal Reserve caused the latter two and simply did not provide sufficient liquidity to stave off economic depression in the 1930s. It is suspect, then, to assert that Keynesian kaleidics and a central banking regime that naturally follows are a stable and efficient path toward economic and monetary prosperity. Lachmann, ironically enough, did not follow his logic of kaleidics and capital theory when discussing the Great Depression (1973, p. 50).

Highlight (Geel) | Locatie 599

> It is this sphere of monetarily deferred exchange that provides the end of our story and a new paradigm within the current-day Austrian school. Austrian monetary theory’s logical conclusion is thus one in which (1) money is no longer the focal point of analysis but rather economic promises in the form of credit, and (2) a new label and accompanying nomenclature is created in order to separate the old Austrian view of money and banking into a more comprehensive and internally consistent one.

Highlight (Geel) | Locatie 603

> The central theme anchored to our economic story is called “monetary disequilibrium theory.” Popularized by Leland Yeager, it describes the phenomenon of supply and demand applied to money as we described briefly above. Individuals in society can choose to adjust how much money they hold in their wallets and bank accounts when they are not spending or investing their cash balances, and this causes non-neutral changes in relative prices and the structure of capital goods. As Woolsey (Beckworth 2012, pp. 211-212)

Highlight (Geel) | Locatie 1384

> It has become increasingly obvious that Mises was, at best, unclear in his view of fractional-reserve banking. In fact, on the next page he claims free banking “is the only method available for the prevention of the dangers inherent in credit expansion . . . under free banking it would have been impossible for credit expansion with all its inevitable consequences to have developed into a, one is tempted to say, normal feature of the economic system. Only free banking would have rendered the market economy secure against crises and depressions.” This flies in the face of his previous assertion. How can a fractional-reserve banking system be the sole inherent cause of the business cycle yet be the only option to secure against such cycles? Does Mises favor fractional-reserve free banking, or does he not? It is not clear whatsoever from our investigation, and it becomes even more complicated the deeper one delves into the literature.

Highlight (Geel) | Locatie 1434

> Here, it seems that Hayek believed the Federal Reserve system should have done more to increase the money supply in the early 1930s, despite his remarks against such policies in much of his work. It is difficult to tell what Hayek truly felt, but it cannot be denied that he was inconsistent in his view of monetary policy. He correctly identified the problem with what he called the “secondary deflation” after the initial bust, but it is not certain what he thought the solution in such a situation should be in absolute terms. Should the monetary regime, whether a central bank or a fractional-reserve system, increase the supply of credit and therefore money as capital values fall and unemployment rises, or should it not?

Highlight (Geel) | Locatie 1506

> This certainly favors the view that Hayek was a market monetarist and Austrian hybrid, emphasizing the need for monetary policy to prevent demand-side deflation while forbidding any attempt to stimulate aggregate demand or stabilize the price level if the latter is falling slowly due to productivity increases. Even though he briefly supported some version of price stabilization in the latter part of his career, he is often referenced by market monetarists as one of the twentieth century’s unsung supporters for NGDP targeting. We must, however, put one more spoke in the wheel of those who attempt to claim Hayek as their own to support their view on monetary theory. In Denationalization of Money ({1976} 1978, p. 98), Hayek makes a very broad but stinging statement to those who advocate for any form of monetary regime not guided by purely market forces, including market monetarists.

Highlight (Geel) | Locatie 1573

> As Bryan Caplan points out in Why I Am Not an Austrian Economist, Rothbard admitted that while wage rates are usually propped up above their market-clearing levels by government intervention or unions, workers can also voluntarily refuse to lower them ({1963} 2005, p.

Highlight (Geel) | Locatie 1578

> In this text, we see Rothbard give credence to the notion that both employees and employers may become convinced, for whatever reason, to hold their wage rates higher than what the market determines to be appropriate in order for the market to clear. But in Man, Economy, and State (2001, p. 781), he does not allow for the possibility for workers to stubbornly hold up their wage rates in the face of reduced aggregate demand when the Keynesian fear of increased hoarding occurs. Such wage rigidity, Rothbard states, would grant the Keynesians their case in “only two ways”—that is, through (1) union maintenance of wages or (2) government-imposed minimum wage laws being implemented. But would workers that refuse to accept pay cuts be any different than a government price control putting a floor below a given wage level? Theoretically not. Any price that is held above its market-clearing level will create a surplus of that good, regardless of the reason it is not falling. Thus, should we not expect such discoordination to occur if individuals are holding up their wage rates voluntarily without intrusion from unions or the government?

Highlight (Geel) | Locatie 1587

> Rothbard does not downplay this possibility; he outright ignores it. As we have seen, however, his analysis falls apart under his own assertion that given wage rigidity, regardless of its origin, changes in the supply of money affect employment. Since this is so, how can he square the circle that “whatever the social money stock, the benefits of money are always utilized to the maximum extent”? The Rothbardians typically emphasize that numerous Austrian economists have responded to and refuted Caplan’s essay. A close inspection of each of these rebuttals by Robert Murphy, Walter Block, and others reveals that no one has responded to this specific point of Rothbard’s mentioned above. It is curious that part of a well-known critique of such an important aspect of Rothbard’s monetary theory has gone unnoticed and unaddressed by his followers.

Highlight (Geel) | Locatie 1626

> Here, we can see Rothbard hinting at something: Prices do not adjust instantly when the money relation changes, and they take time to do so to ensure that the market for goods clears. Even if relative prices do not change—which Austrians know to be false in reality—price adjustments still do not occur fluidly. Hence, even a generous reading of Rothbard shows that he at least shallowly understood the inflexibility of price adjustments in the process of changes in the supply of or demand for money. Usually, economists speak of sluggish price adjustments when looking at the supply of and demand for goods and services, yet Rothbard explicitly mentions the “money-side” of the economy, or MV in terms of the equation of exchange. We must first recall earlier when he admitted that workers and employers will sometimes voluntarily refuse to lower wage rates, thus increasing unemployment. Yet, why would the prices of goods and services be any different due to an increase in the demand to hold money?

Highlight (Geel) | Locatie 1633

> To repeat, any price that is held above its equilibrium price will result in an unsold surplus of that good in the market, whether by government decree or voluntary action by individuals. Rothbardians typically underestimate or deny any problem, but here we can clearly see a disconnect. He generalizes correctly that “the principles of maximum and minimum price control apply to all prices, whatever they may be: consumer goods, capital goods, land or labor services, or the ‘price’ of money in terms of other goods.” The price of money here refers to the “array” of prices within the price level affected by changes in the money relation. But if this array of prices does not equilibrate quickly or smoothly in a free market, how can any supply of money be optimal at any given moment? Mises's earlier point that an increase in fiduciary media has helped “avoid the convulsions that would be involved in an increase in the objective exchange-value of money” exposes both his and Rothbard’s ambiguity on the matter. The objective exchange value of money is equivalent to the overall purchasing power of money. If the PPM increases (overall prices decrease) from an increase in the demand for money, and this inevitably leads to violent economic contractions or recessions, as Mises admits, how can the supply of money always be sufficient?

Highlight (Geel) | Locatie 1643

> The answer to this question is that, at any given moment in time, it is not sufficient. To be so would equate to a situation in which monetary equilibrium holds true, which is not feasible, especially by Austrian standards. Rothbard’s analysis is unrealistically restricted to an equilibrium state transitioning to another equilibrium state in which relative prices and time preferences remain the same. While using equilibrium models and reasoning can be useful, in this case it is detrimental to Rothbard’s and Mises's view on money. Prices and wages eventually adjust in the long run, carrying out the necessary utility of money. But if individuals voluntarily refuse to lower their selling prices or wage rates, this is conceptually the same as a minimum price control for the duration that it is held above the amount it would take to sell the currently unsold surplus. The stock of money, then, cannot provide the services it “does and can do” that Mises and Rothbard state until this occurs. This takes time and can result in a costly recession in the meantime, as Mises schizophrenically admits. Rothbard’s point of a government-mandated price floor applies equally to the free market in that it “is equivalent to a maximum control on the PPM. This sets up an unsatisfied, excess demand for [insufficient supply of] money over the stock of money available—specifically, in the form of unsold stocks of goods in every field.” Thus, we can conclude that Rothbard’s principle on the supply of money requires revision: Any supply of money is optimal in the long run, but not in the short run.

Highlight (Geel) | Locatie 1708

> In the moneysphere, a change in the price level does not preclude a change in relative prices, since that average consists of the array of prices that money itself affects unevenly. Hayek knew this when he said, “Almost any change in the amount of money, whether it does influence the price level or not, must always influence relative prices.” Rothbard seemed to have the neoclassical notion of money neutrality in mind when discussing the general price level. Other Austrians correctly identify a changing price level with changing relative prices. Rothbard’s protégé Joe Salerno has also denied the usefulness of the price level, calling it a “meaningless concept” and “unexceptional” as a statistical measure. In Money: Sound and Unsound, he emphasizes that individual and relative prices matter most in monetary theory, just like Rothbard and other Austrians. An

> interesting aspect of the book is that it mentions the purchasing power (and value) of money over ninety times. But what is the purchasing power of money if only individual prices have any meaning? If an individual holds a certain amount of purchasing power in his cash balance, as Salerno and others assert, how can purchasing power be aggregated in any meaningful way? Is it not inconsistent to reject an aggregate measure of the level of prices while also emphasizing an aggregate of purchasing power? What is, in fact, the purchasing power of money?

Highlight (Geel) | Locatie 2061

> Conversely, the moneysphere includes the use of money by virtually every market participant in exchange. Money, therefore, is the common denominator of value, or purchasing power. This numeraire is one-half of every exchange and is thus a “measure” of values through observed objective exchange ratios. It has no direct-use value itself, and it is therefore a way to conduct economic calculation through price comparisons. Barter has no such numeraire. Every price is in relation to another—a relative price. Put differently, in barter every price is a nominal price. Person A can work and earn income in terms of goods from his employer. If he works forty hours per week, the employer can pay him in food, other necessities, or even luxury goods. These goods will command a price in the market in terms of numerous other individual goods, but not for all goods. Conversely, income in the form of money has both a nominal and a real, or purchasing power-adjusted, component. When economists and Austrians speak of price inflation, money is that common denominator in which money’s value falls because it is being compared to every single good and service in the economy. There’s no similar way to measure this in barter; any good can be traded for any other good. There are an almost infinite amount of possible exchanges that can happen, so while nominal prices and incomes exist and can change in barter, there is no such thing as inflation or a price level since there is no universally accepted good to measure or even discover them. In addition, incomes can rise or fall for certain individuals in nominal terms due to supply shocks like crop failures, technological improvements, or natural disasters. Total incomes, therefore, can rise or fall. But there is no price level and therefore no inflation or deflation since there is no money to define it against. Should a similar phenomenon occur when money is used, changes in the price level can tell us if real incomes are rising or falling or if they are remaining relatively steady in terms of that unit of currency.

Highlight (Geel) | Locatie 2128

> Furthermore, the Austrians who remain skeptical of or outright reject the notion of a price level find themselves implicitly and inconsistently using one when speaking of their theory of the trade cycle. As the boom progresses following monetary stimulus by the central bank, the prices of consumer goods rise as Cantillon effects take hold and the receivers of the increased credit spend it. Jesús Huerta de Soto (2012, pp. 371-372) explains the effect of this high time-preference spending on interest rates:

Highlight (Geel) | Locatie 2152

> The previous example can be used in terms of the Austrian theory of the business cycle to show how its Austrian proponents are caught in a state of confusion by rejecting the meaning or even existence of the general price level. At that juncture, a credit expansion has occurred and the boom is near its peak. Capital values rise, as does the expectation of inflation. A bank loans one thousand dollars to an entrepreneur for one year at a nominal interest rate of 3 percent. He will use it to purchase capital goods and expand output in the higher stages of production. However, the bank suspects, for whatever reason, that consumer price inflation will be roughly 3

> percent in that time period, forcing the bank to charge a nominal rate of 6 percent to the entrepreneur. Let us assume, for a moment, that the bank is correct in its prediction. By the end of the year, price inflation has risen 3 percent, as expected. How did the bank estimate this with any sort of accuracy? If we take the Austrians seriously and only consider relative prices to be of significance, how does the bank define this 3 percent inflation rate? What specific goods is it looking at to dictate what this “inflation” rate is?

Highlight (Geel) | Locatie 2160

> In truth, this question at its core is nonsensical. A bank or any other institution that wants to estimate inflation must use some form of price index based on a chosen basket of goods. In other words, some measure of an average level of prices must be consulted. For some circumstances, it is more relevant to use a more specific price index. In others, such as the one mentioned above, a more broad measure is appropriate. The Austrians who reject the use of a price level on both a conceptual and statistical level fail to realize that their own theory of business cycles implicitly relies on it, in part. So, how can a price level not exist when the expectation of inflation by lenders, consisting primarily of banks, during the upturn of the cycle relies on them?

Highlight (Geel) | Locatie 2202

> Contrary to both of these claims, whenever a change in the demand for or supply of money causes a proportional change in the price level in a given time period, relative prices are also radically changed within that change in the general level of prices. Thus, the price level does have a role to play in monetary theory, albeit a limited role. But let it be said that refusing to use or acknowledge the general price level as a construct in analysis, as many Austrians do, is a serious misunderstanding of how a monetary economy differs from the kind of direct-exchange economy they claim a money-using economy evolves from.

Highlight (Geel) | Locatie 2332

> Number five in the list above puts the supply of money and the demand to hold it at center stage. This implies that when this relationship is altered, the general price level and hence the purchasing power of money will change, yet it does not inherently ignore or reject Cantillon effects or relative price changes. It is, therefore, in accordance with methodological individualism, the Austrians’ second-favorite economic principle behind praxeology. Recall above that Mises himself used this definition multiple times throughout his career, if inconsistently, referring to it as the money relation. While his view that inflation is not a praxeological concept rings true, it is interesting to note that the other two most popular Austrian economists, Rothbard and F. A. Hayek, used this definition, too, albeit inconsistently like Mises. And although asserting that this makes this definition the best option would be an empty appeal to authority, it would certainly show the Austrian enthusiasts that it has precedence in the Austrian tradition, and therefore it is coherent and useful in terms of their business cycle theory and criticisms of Keynesianism.

Highlight (Geel) | Locatie 2391

> Despite the claims of some Austrians, there is no objective definition of inflation. In addition, the statement by this same group that the concept or measurement of the general price level either does not exist or is meaningless is unfounded. To possess these views is to commit several fallacies and contradictions that waste time and effort

> in arguing for them—time that could be better spent discussing the theory of money and the business cycle itself. If one cannot argue in favor of their view of business fluctuations and monetary policy without using a specific yet dated meaning of a term, then perhaps one should sharpen their analytical tools and debating skills rather than being overcome with nostalgia for a term that no longer has a place in the economics field. Furthermore, without being able to properly measure or define the money supply and hyperinflation, these Austrian economists and enthusiasts cannot logically insist on their definition of inflation without being ambiguous and inconsistent.

Highlight (Geel) | Locatie 2467

> Menger's point was insightful yet simple: There is no record of such events transpiring, and thus we must reject this view in favor of the commodity-based perspective. Ironically, as plausible a story as the Menger-Mises tale is, there is no historical record of a barter society transforming one or several of its goods to that of a pure medium of exchange, either. We must therefore question its universal validity, despite the followers of Mises, such as Rothbard, claiming that money "must develop out of a commodity with a previously existing purchasing power, such as gold and silver had. It cannot be created out of thin air by any sudden 'social compact' or edict of government." But why must money emerge this way? Some state that this is a praxeological aspect of monetary theory, and therefore is a priori and undeniable. Modern Monetary Theory has claimed that money is instead a creation of the state, often citing anthropologists like David Graeber, who has asserted this view in his book Debt: The First 5000 Years. However, when read closely, Graeber (2011, p. 213) admits how plausible the Mises-Menger story is when he states:

Highlight (Geel) | Locatie 2483

> Graeber admits the plausibility of the barter story of money but does not believe that smaller scale currencies or IOU systems can "create a full-blown currency system, and there's no evidence that they ever have." George Selgin has attempted to shed some light on this issue of historical precedence by explaining that "while subtle forms of credit or outright gift giving may suffice for affecting exchanges within tightly knit communities, exchange within such communities hardly begins to take advantage of opportunities for specialization and division of labor that arise once one allows for trade, not just within such communities, but between them, that is, for trade between or among strangers."

Highlight (Geel) | Locatie 2507

> We inevitably find that there is no objective or fact-based theory of how money came about. Neither fiat money nor gold (nor any other commodity that has served as money) can lay an undeniable claim to the origin story of how society has chosen a medium of exchange.

Highlight (Geel) | Locatie 2551

> We can see, then, that since its birth Bitcoin was exchanged "for fun" and without any existing price being considered amongst its traders. Hence, we can conclude that Bitcoin had no market price until it was already being used as a medium of exchange, and therefore since it was initially by definition a noneconomic good with no objective exchange value, it is a real-world example of a medium of exchange that was established

> voluntarily without a prior use as a commodity. This shows that Mises's regression theorem is not an a priori explanation of the origin of money or its purchasing power. An

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Highlight (Geel) | Locatie 2565

> In sum, those originally trading and acquiring Bitcoin had its inevitable use as a private medium of exchange in mind, thus solidifying the view that money does not necessarily originate as a commodity with direct-use value.

Highlight (Geel) | Locatie 2588

> Neither of these local currencies, nor numerous others, began as commodities and therefore do not apply to Mises's regression analysis.

Highlight (Geel) | Locatie 2595

> Consider all of the goods throughout human history that have been used as money, such as livestock, cowrie shells, base metals, rice, slaves, tobacco, leather, and beads. Virtually all these monies have failed, which is a rate much higher than the 80 percent rate we've seen in the previously mentioned study for local currencies. The important point, however, is that these currencies are able to exist for a considerable—and sometimes an indefinite—amount of time without any previous use as an economic good. The relative success of Ithaca Hours in the 1990s is another example. With over four hundred businesses and thousands of people having transacted with the currency during that decade, as the average user is "well educated, has a preference for green politics, and experience in social activism," it is a testament to how money has no definitive origin, and nor does its purchasing power.

Highlight (Geel) | Locatie 2647

> Money is therefore a social ritual that directly results from the teleological and intersubjective plans of those who do not create it for its own sake but as the implicit means to acquire the explicit means that aids them at achieving their desired ends. Only through exchange, not mere choice, can money be conceived. We are all its mother. It is a verbal, social, and living contract in which any object, tangible or intangible, can be money today and nonmoney tomorrow. More specifically, an economic good can have a certain degree of moneyness today and a significantly different degree of moneyness tomorrow. The proper way to view monetary theory is therefore through the methodological subjectivist window.

Highlight (Geel) | Locatie 2653

> Money is called many things: a medium of exchange, currency, medium of account, capital, numeraire, unit of account, store of value, and final means of payment, among other terms. These terms are based on what money does, not what it is. Economics textbooks speak of the store of value and unit of account role of money despite the fact that many things can be called a store of value, like fine art, and that historically there have been nations that used money as a medium of exchange but often not as a unit of account. As one example, Chile currently uses the Unidad de Fomento as its unit of account and the Peso as its money. But it can never be overemphasized that the most important function of money is its role as the medium of exchange. All other

> services it provides are subsidiary to its main role at facilitating multilateral exchange, though they certainly play a role in its quality and evolution. In addition, there are several physical characteristics that, according to economists and free-market theorists, money must possess in order to be sustainable as a widely used medium of exchange. They are as follows: Fungibility Divisibility Scarcity Durability Portability Recognizability Malleability Acceptability While tangible traits of money, it should never be ignored that these are important only because of the subjective values people have when carrying, investing, purchasing, and exchanging money. Each characteristic of money has a different degree of importance to individuals, and the relative importance of each one can and does change over time. Centuries ago, gold was held in large quantities by kings and was rarely moved even though it was considered a show of wealth. As time progressed and as economic activity became more expansive and diverse, the portability and malleability of gold became more important, leading to private coinage. Varying stocks of gold had to be casted and shaped into coins and bars so as to provide confidence that the individuals acquiring the gold would be content with its authenticity. This increase in the importance of recognizability, divisibility, and acceptability lead to the measuring of the weight and purity of such coins, as well as “stamping.”

Highlight (Geel) | Locatie 2779

> More will be said on this later, but for now, it suffices to say that money prices make it possible for capital to be accumulated while money is exchanged, held, saved, loaned, and invested. The vast supply of consumer goods created by the capital produced by modern monetary economies are made possible by “language-like” monetary exchange. Such a system carries the load that language itself is insufficient to do.

Highlight (Geel) | Locatie 2805

> Holding money has a distinct purpose for any individual. One may be uncertain or hesitant about the future, or anticipate favorable future market conditions, and therefore will desire to hold a considerable cash balance until they wish to exchange their money for nonmoney goods. We must quote Ludwig Lachmann (1986, p. 95) at length, as he states:

Highlight (Geel) | Locatie 2819

> Again, we are confronted with money’s role as a store of wealth. There is no doubt that a quality medium of exchange is relatively stable and predictable in its purchasing power over time. This implies its importance as a store of value. It is an ambiguous tug-of-war between holding money and spending money in exchange that prevents an objective definition of money in terms of methodological subjectivism. Hayek recognized that the term “money” can be ambiguous when he said, “I have always found it useful to explain to students that it has been rather a misfortune that we describe money by a noun, and that it would be more helpful for the explanation of monetary phenomena if money were an adjective describing a property which different things could possess to varying degrees.” We will attempt such a feat below.

Highlight (Geel) | Locatie 2852

> In sum, the ability to exchange to a greater degree enables a greater degree of choice. As the pivotability of holding a more liquid good rises, it becomes a medium of exchange. This causes more people to hold it for

future spending, as they anticipate its value will remain steady or even rise. The store-of-value role of money diminishes, then, and the medium-of-exchange role becomes dominant. The demand for money and pivotability are inherently linked. One does not hold a cash balance unless they require time to decide what to spend their money on, and that choice depends on the pivotability, or liquidity, of that money. The demand for money is a highly debated topic in monetary economics due to its inherently subjective nature. Keynes himself attempted to disaggregate it so as to discover the motives of individuals for holding money rather than spending it. One of the keys to understanding the motivations for holding cash balances is the quality of money rather than just its quantity. In his essay "The Quality of Money," Philipp Bagus makes the case that the quality of money has a greater influence on (1) the purchasing power of money and (2) people's desire to hold a particular money in their cash balance. He states:

Highlight (Geel) | Locatie 2885

Overall, Bagus is correct to emphasize money's quality over its quantity (at least in some aspects of money's evolution), but he is too focused on its past roles in serving the economy rather than its future. Expectations are what guide the market, and past prices only explain how a given situation came to be. We can therefore conclude that the quality of money does not determine what can become money and what cannot but rather which kinds of money are sustainable and which kinds are not.

Highlight (Geel) | Locatie 2927

As we emphasized earlier, money does not inherently exist. Individuals in society collectively "project" their subjective desires to exchange onto certain physical objects, and when enough individuals implicitly agree on one or a few of these objects to be more widely accepted, then the ritual of monetary exchange evolves. Every economic good has a certain degree of pivotability, and the commodities or financial assets that possess greater pivotness are more likely to be chosen as a widely circulating medium of exchange. As an economy expands and trade becomes more complex, there is a tendency for one medium of exchange to emerge that then allows for more intricate multilateral exchanges.

Highlight (Geel) | Locatie 2933

However, the entrepreneurs who intend to invest in capital in the higher-order stages of production to help expand economic activity require purchasing power, or savings, to do so. One cannot invest without saving first. Here, we must distinguish between savings in terms of money and savings in real resources, though the two are related. When aggregate savings increase, it is implied that society has deferred consumption spending to sometime in the future. By doing this, businesses in consumer goods industries such as retailers receive a signal by the reduced demand for their products. If people in the aggregate save their money income in banks, the banks receive these funds in the form of deposits and adjust interest rates downward, ceteris paribus, to loan that money out to entrepreneurs. These entrepreneurs produce capital goods in the higher-order stages of production that are essentially consumer goods that have yet to "mature" by combining them with complimentary capital and labor.

Highlight (Geel) | Locatie 2959

> Herein lies one of the major problems of monetary theory: Prices and wage rates do not adjust quickly. In fact, many prices are very sluggish to change, especially downward with a reduction in demand. Wage rates behave similarly. One may accuse the government of propping wage rates and prices, which is historically accurate, but they would still remain inflexible, or sticky, even in a free market. In Monetary Kaleidics, the author describes several situations in which this will hold true such as employee morale, the high-wage doctrine, and contracts denominated in nominal debt, calling these instances “entrenched wages.” With prices not adjusting right away, they remain above their market-clearing levels. When any price is held above its equilibrium, it results in a surplus of that good remaining unsold. In the labor market, this ends up as rising unemployment, and in the capital goods industries this has been labeled “idle capacity.” When this occurs, there is a recession, not economic growth. In other words, entrepreneurs cannot acquire the money to invest in organic economic expansion if it is put under mattresses, buried, or kept in any sort of bank account with the intention of bailment. Those like Huerta de Soto are critical of fractional-reserve banking in which banks issue more credit than the reserves (monetary savings) they hold in their vaults. These economists find that credit that is unbacked by savings creates the business cycle and harmful inflation that reduces the standard of living of society. Their claim is that just because individuals hold higher cash balances, whether under mattresses or in checking accounts, it does not follow that banks should issue more credit and therefore money to offset this rise in savings. This is because of the fact that wage rates and prices do adjust eventually, and the fact that they take time to do so is not problematic because it is of a voluntary nature, whereas banks that issue “fiduciary media”—to use an old fashioned and out-of-date term—are committing some form of fraud or deceit, as well as exacerbating the business cycle.

Highlight (Geel) | Locatie 2979

> However, contrary to the assertions of Hoppe and Huerta de Soto, deflation is often unexpected, particularly from the demand side of the economy. But why do individuals often hold higher cash balances? The answer is usually some combination of fear, uncertainty of the future, or a lack of knowledge.

Highlight (Geel) | Locatie 2994

> In this way, we can call money a “medium of search” or, more appropriately, a deferment of decision, and this complements the notion of money’s pivotability. But not everyone can increase the money holdings in the aggregate without significantly affecting the price structure, employment, and output.

Highlight (Geel) | Locatie 3089

> Banks are indeed focal points for the intermediation of these economic promises in the same way that money is the nucleus of exchange. Put another way, money solves the double coincidence of wants problem (demand), while promises solve the double coincidence of means (supply of capital goods). The value of goods we desire is inevitably imputed to the value of capital that creates those goods. Money is sometimes, though not always, used to pay for consumer goods, but bank promises facilitate the exchange for the multitude of capital goods that comprise the structure of production. This is because, as we have shown, money is often in high demand and its supply is often relatively inelastic, such as with gold. Regardless of whether we call them promises, credit, or

deferred exchanges, they allow for the contractual agreement to complete payment at a later time throughout the capital structure so that production can proceed without having to wait for tangible money to change hands between the suppliers of inputs.

Highlight (Geel) | Locatie 3139

This is why fractional-reserve banking is imperative to society, on both theoretical and historical grounds. If consumers are not committed to exchanging, and money's existence is based on exchange, then it follows that those who are willing to exchange their goods for money will not be able to engage in commerce (in the aggregate) unless those who are deferring their spending allow for their funds to be loaned to the latter. In such a case, banks serve as the intermediate and attempt to maintain intertemporal coordination so that each group is able to accomplish their goals—spending and not spending, respectively—with regards to time so that each of them can engage in the precise amount of exchanges they desire. Bank promises, then, "are universally used by men as money." As Scherman again (pp.

Highlight (Geel) | Locatie 3217

Contrary to many economists, a perpetually increasing money supply is not desirable, nor is a fixed supply of money. Instead, the stock of money via bank promises should follow changes in the demand to hold money through the clearinghouse mechanism in free banking. While this mechanism cannot perfectly mimic changes in the money relation, it can provide a proxy for it that largely eliminates monetary disequilibrium. Banks therefore should adjust either interest rates on loans in relation to the "natural" rate of interest or their reserve ratios to accommodate changes in savings and deposit withdrawals. In the most advanced economies humanity has ever seen, it is this adjustability of money that is paramount.

Highlight (Geel) | Locatie 3274

In sum, we can see how bank promises, economic growth, money, and credit all intertwine and create an interdependent web of economic activity that is inherently based on the intersubjective nature of money. Bank promises greatly assist in preventing recessionary monetary disequilibria and inflationary monetary disequilibria. Should banks overissue or underissue promises with regard to the demand to hold money, the market value of banks' notes and deposits will change abruptly, exacerbating monetary disequilibrium. Should there be a breakdown in the fulfillment and structure of economic promises, there will be a commensurate breakdown in the structure of capital, which we will investigate later.

Highlight (Geel) | Locatie 3347

As we explained above, eventually money by itself cannot transcend through both time and space simultaneously. Its scarcity, which was previously a very important part of its evolution as money, now becomes a restraint on its very purpose as a medium of exchange. It solves the double coincidence of wants in terms of consumption but very often cannot solve the double coincidence of means in terms of capital accumulation and implementation. When its purchasing power rose as the demand to hold it increased, storage costs fell, and this created a reason for modern banking. What became more important for money was not its scarcity, nor its ability to be perpetually increased—it was its adjustability.

Highlight (Geel) | Locatie 3353

> When the demand to hold money changes, the supply is required to change with it to suit the needs of commerce. If consumers wish to defer consumption spending and entrepreneurs wish to increase production at the same time, then the money required to accomplish the latter will not be available if the consumers do not allow it to be available by putting it under their mattresses or safekeeping it in warehouses. Money, in this case, is not adjustable, and since prices and wage rates do not adjust quickly or efficiently themselves, economic growth and prosperity are deferred in the form of perpetual recessions.

Highlight (Geel) | Locatie 3357

> Fractional-reserve banks solve this issue. By enabling the adjustment of promises to pay in money to those entrepreneurs, bank promises fulfill the role of money in the capital structure where money itself could not. Bank promises will be valued on par with money to the extent that the banks in question have fulfilled past promises and have thus gained the trust of society. Money has a spatial component, and bank promises have both a spatial component and an inherent time dimension since they are deferred exchanges by their nature. They take place in time, whereas exchange with “real” money often does not do so. “That metallic money is not an ideal instrument of circulation, and that it can be conveniently replaced in this respect by all sorts of circulating credits has been known from the earliest times,” wrote Charles Rist in History of Monetary and Credit Theory: From John Law to the Present Day. “But nobody has yet shown that circulating credits can replace the precious metals in their function as a store of value.” On the contrary, we have shown how bank promises can function as real money in the long term if banks are prudent in the issuance of credit.

Highlight (Geel) | Locatie 3444

> The demand for cash balances is what constitutes people’s aversion to the uncertainty of the future. The more uncertain an individual is, the more likely they will hold a higher cash balance in case of emergencies, job loss, or simply better buying opportunities in the future. Typically, individuals’ cash balances do not change abruptly or in large amounts, as they attempt to “smooth” their consumption over time. However, in certain circumstances people can decide very quickly to reduce their expenditure by increasing their demand for real balances. This can have severe consequences on economic activity and wealth accumulation. While Austrians do acknowledge the importance of cash balances, they do not put much emphasis on the role of income, expenditure, and changes in real balances. It is in these subtopics that monetarianism is closer to monetarism and, to a lesser extent, Keynesianism.

Highlight (Geel) | Locatie 3451

> The monetarian view of capital is derived almost entirely from the Austrians, though with considerable differences. The entire economy is divided into stages of production, and these stages each produce capital goods that are combinations of labor, land, and other capital goods to create what constitute future consumer goods. Time preferences are what dictate the trade-off between consumption and investment. Or, to be more specific, the time preferences of all the individuals in society dictate whether entrepreneurs will produce consumer goods that will be ready for consumption in the near future or the further future. If social time preferences are high, then entrepreneurs will likely produce capital goods that will “mature” into consumer

goods more quickly as they travel up the structure of production. If social time preferences are low, then entrepreneurs will produce more complex goods and increase the depth and breadth of the structure of production to create capital goods that will take considerably longer to mature into consumer goods.

Highlight (Geel) | Locatie 3458

This basic theory of capital is foreign to monetarism and Keynesians. They see the economy as a mere two-sector economy consisting of investment and consumption goods industries. The Austrians, on the other hand, rightly recognize that the economy is much more complex and that most stages do not fit neatly into “investment” or “consumer” industries. Different kinds of industries have different aspects to them that may make them more or less capital intensive in that they rely more on capital than labor to produce capital goods. Consumer goods industries might even occasionally be more capitalistic than some investment industries due to the reliance on more capital as well. During normal times when an economy is either progressing through increased productivity, technological innovations, and output or regressing due to a local natural disaster or war, the capital structure will be altered because of real, or supply-side, occurrences. However, this is where monetarianism begins to deviate from the Austrians.

Highlight (Geel) | Locatie 3466

The economy and structure of production are not particularly capitalistic, being more advanced than a barter system but still fairly primitive due to production being based mostly on labor with little capital accumulation. Here is also one notable difference from a modern day economy: there are no banks and no sophisticated credit system. In fact, the supply of money is fixed and does not change. Deferred exchanges in production occur on occasion, which explains the lack of a more complex and capital-intensive economy. Thus, savings are not automatically channeled into investment to near the extent that would occur in a fractional-reserve free-banking system. If individuals wish to make their savings available for investors, entrepreneurs, and businesses, they must seek them out themselves and arrange contracts so as to secure repayment. We may also assume that the government either does not exist in this economy and that property rights are enforced through purely voluntary and private institutions or that it exists with the single purpose to enforce contracts among individuals and businesses. On a day-to-day basis, economic activity continues along as any other day. Slowly, people accumulate wealth over time through savings and thrift, and more people gradually begin to engage in deferred exchanges to earn more on their savings rather than keeping them under mattresses or in locked safes in their homes. Real incomes rise, as does economic output, slowly and predictably lowering consumer prices and real factor prices, though the prices of both capital goods and consumer goods are relatively stable overall with small fluctuations. No recessions have occurred, nor have any disruptive supply shocks.

Highlight (Geel) | Locatie 3485

This is a case in which, in the short run, people desire greater cash balances for a period of time but cannot do so because (1) the money supply is fixed, so it is quantitatively impossible for everyone to increase their cash balances at once, and (2) prices and wage rates are largely inflexible. It is true, in the long run, that prices adjust and the fall in prices resulting from the reduction in consumer spending allows for the former insufficient cash balances of the populace to increase in purchasing power since the real value of each dollar rises as prices fall. In order for monetary equilibrium to occur, then, either (1) prices must fall enough for the increase in nominal cash

balances to increase in purchasing power, or (2) the supply of money must increase to match the increase in the demand to hold it at the current price level. Since the second solution is impossible in our scenario and the first cannot occur in the short run (other than a small percentage of prices that fall fairly quickly), monetary disequilibrium cannot, then, be achieved in the short run. If this increase in the demand for cash balances, and therefore savings, is not met with an increase in the supply of money or a fall in prices or wage rates, what effects does this have on the economy? Is this even a problem?

Highlight (Geel) | Locatie 3523

In sum, money as a stock flows to areas in the capital structure based on where it is spent, and this expenditure is based on society's time preferences. This dictates the "shape" and sustainability of a given economy.

Highlight (Geel) | Locatie 3525

Let us assume, as we began with an increase in the demand for money, this increase equates to more savings and both less investment spending and less consumer spending, though not equally in proportion. The supply of money is fixed and this increase in savings is unexpected, so less expenditure equates to less income. If the capital structure is composed of five stages of production (R&D, mining, manufacturing, wholesale, and retail) and less is spent on retail, R&D, and mining, with spending on manufacturing and wholesale remaining the same, then businesses in those industries will receive less revenue and therefore less profits. An individual business in retail, for example, receives less revenue for its goods. The profits it would have paid to its employees, manager, and owner are now reduced. The owner could decide to lower selling prices in accordance with the fall in demand for its products, but for several reasons, this is not likely to occur. One such reason is the "who goes first" problem in which a seller is reluctant to lower prices because doing so before competitors may reduce the business's overall market share, so the lack of knowledge of what the competition in the same industry will do discourages businesses from lowering prices right away. Thus, the business owner must cut expenditures as well. But where? He could decide to lower the wage rates of his employees to maintain the spread between marginal revenue and marginal cost, but for reasons like employee morale and entrenched wages reducing productivity—and therefore not resulting in actual reduced nominal, or even real, wage rates—he will likely reduce hours worked or lay off his employees, reducing output. The fall in output does not appear to occur right away, but rising unemployment soon becomes apparent since wage rates are being voluntarily held above their market-clearing levels. So, the workers see their incomes reduced. The income velocity of money, which is the demand for money relative to income, then falls since the demand for real balances, ceteris paribus, remains the same as income falls and prices do not change right away. In other words, given that a worker's income is received at predictable intervals and in fairly stable amounts, if they lose their job suddenly due to layoffs their demand for real purchasing power is too low relative to their now lower incomes. They will therefore increase their demand for money by spending less, since they cannot sell their labor and selling assets is more difficult due to the overall reduction in demand in the economy. This fall in workers' spending now reduces the income of businesses that would have otherwise received their expenditure, and these businesses subsequently reduce employment and output.

Highlight (Geel) | Locatie 3544

The workers and business owners in these sectors now decrease spending, thus reducing incomes in yet other stages of production since the fall in demand for consumer goods equates to a reduction in the demand for the

> labor and capital in the higher stages of production. Businesses that usually purchase capital from higher up in the supply chain now reduce their demand for this capital, and this reduces the incomes of its owners. It becomes obvious, then, that considerable increases in the demand for money with a fixed supply of money cannot account for the increased purchasing power required to complete all desired exchanges at the going price level.

Highlight (Geel) | Locatie 3549

> An Austrian might reply that this is all based on voluntary action and is therefore of no concern, but what we are concerned about here is not the morality of the system but the inability of people to complete exchanges when they desire to. Individuals may be acting voluntarily, but due to the lack of perfect knowledge and alertness to unexpected changes in the subjective demand for real cash balances, there is a lack of coordination in time-oriented production. In sum, savings do increase, but not to the extent of intended investment. Put differently, the higher stages of production expected a given amount of spending on their capital goods to receive enough income to incur a profit after paying for labor and the factors of production, but they are surprised at this unpredictable rise in the preference to hold higher cash balances. Furthermore, because there are no banks to loan out savings and deferred exchanges are relatively uncommon, the higher-order stages are starved for the flow of money, or funds, to complete the production of capital goods that would have eventually become consumer goods for individuals to purchase. Time preferences, then, are not aligned properly with the capital structure. It is not sustainable, in a similar way to when the central bank creates an artificial and inflationary boom and bust cycle. In this case, there is no boom—only a bust, or recession.

Highlight (Geel) | Locatie 3565

> above their market-clearing levels. For whatever the length of time that this situation remains, a recession occurs in the short run, and this not only reduces economic output but also inhibits the ability of society, composed of individuals, to accumulate wealth and increase their standard of living in the long run. Thus, unlike the Austrians who focus primarily on the long run and Keynesians who focus primarily on the short run, monetarians understand that long-term wealth accumulation and increases in the standard of living require the ability of desired exchanges to be completed in the short run. If the latter cannot be completed in any significant amount, then the former will never be realized to its fullest potential. We will cover more on the deflationary aspect of monetarian capital theory in the next chapter. For now, let us show how this version of monetary disequilibrium distinguishes monetarianism from all the heterodox and orthodox schools of thought. Zero-Reserve

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Highlight (Geel) | Locatie 3593

> Any investment that does occur is only possible through individuals committing to deferred exchanges through promises to loan their own savings. It does not take much imagination to understand that (1) savers will have considerable difficulty in finding worthwhile borrowers who are likely to complete promises on both moral and economic grounds, and (2) savers will be distrusting of any entrepreneur or businessman who does not have a pristine record of completing past promises. The search for trustworthy borrowers alone makes the opportunity cost of loaning out personal savings likely too high for individual savers. Thus, when the demand for money increases and savings rise, the flow of funds that could be invested to allow high-order stages of production to expand are likely to be kept away from any deferred exchanges and, therefore, promises. The funds in question are simply a definite supply of the medium of exchange that Mises describes in his regression story, funds which

came about through barter. Though the economy in our example is somewhat primitive compared to the current-day economy, it is certainly more advanced than its previous state as a system of direct exchange. Such an endeavor is backward-looking, yet we are interested not in money's price yesterday or the day before that but in its future. The economy here is riddled with deflationary tendencies, has no banking or credit system, and only one medium of exchange prevents monetary disequilibrium from being resolved in the short run. If we consider the evolution of money as the intersubjective nature of human interaction, like language, we can see that a forward-looking theory of money is necessary as a prerequisite for understanding how modern economies came to be and how they will continue to evolve.

Highlight (Geel) | Locatie 3629

Since the owners of each bank have a good reputation for completing past promises and completing all deferred exchanges, the customers of each bank trust that bank to fulfill its promise to pay depositors on demand. However, the banks still hold reserves in the form of dollars because they know that, on occasion, individuals will want to hold physical money rather than the bank's digital deposits or liabilities. This could be to keep a bank "in check," or some depositors might just prefer the aesthetic of dollars instead of notes. This is the nature of fractional-reserve banking. Banks must find a balance between the supply of savings and the demand for loans, just as the economy must find a balance between the supply of and the demand for money. Both constitute the moneysphere, as our example shows.

Highlight (Geel) | Locatie 3649

With the increase in economic output, real incomes rise and wealth accumulation continues. The structure of production becomes even more capitalistic. Prices fall gradually in a predictable manner, and savings are channeled efficiently into investment, maintaining both intertemporal coordination and monetary equilibrium. The banks issue loans to entrepreneurs at precisely the rate that customers hold their money balances in their deposit accounts. Promises are no longer considered to be "as good as" gold, or the dollar, in this case. They are now viewed entirely as money and cannot be distinguished from it in terms of the minds of every individual, including workers, entrepreneurs, capitalists, homeowners, manufacturers, and businessmen in general. All of them are depositors, and all of them are directly and indirectly affected by the interdependence of bank promises, for these promises are now effectively and literally money.

Highlight (Geel) | Locatie 3656

just one bank promise is not fulfilled, such as the failure of an entrepreneur to repay bank B's loan, then bank B may be unable to cover all of the short promises to its depositors. However, in our example, each bank performs perfectly by aligning their respective market rates of interest with the natural rate of interest. Boom-bust cycles have been completely eradicated and monetary equilibrium is achieved. Since bank promissory notes now function entirely as dollars and therefore as money, the two are no longer distinguished in the eyes of society. The bank increasing the supply of credit through promises is precisely the same as increasing the supply of money. Any time the demand for money changes, banks adjust accordingly and change the amount of loans granted so as to not commit maturity mismatches. While monetary equilibrium is an impossible state to achieve for any economy, it is appropriate for our example.

Highlight (Geel) | Locatie 3695

> In a free-banking system, banks that develop and maintain a reputation of keeping their promises to depositors and borrowers consistently will develop trust to such a degree that eventually individuals have little or no reason to withdraw their money, or reserves, from their banks. In our example, the customers of banks B and D saw no reason to request the banks' money in order to pay for goods, services, capital, or labor. The owners of those assets were quite content with accepting another bank's promissory notes as a medium of exchange, knowing that the bank will redeem it if necessary, and therefore everyone else will accept it in exchange as well. Just as a medium of exchange requires significant pivotability, or pivotness, so do bank promises. The important distinction is that bank promises provide adjustability in accordance with society's demand for money, whereas money itself does not, and this is (1) what gives bank promises value and (2) provides an even greater incentive to hold and use them as opposed to money. In fact, as technology advances and a greater percentage of the population uses digital money in the form of debit cards and Venmo accounts, the holding costs of bank promises fall even more relative to "real" money, making bank customers even less likely to redeem the bank's promises for that money.

Highlight (Geel) | Locatie 3705

> This progression leads us into the discovery that the last "frontier" for monetary theory is not central banking, full-reserve banking, or even fractional-reserve banking; it is zero-reserve banking. This may seem counterintuitive, even to economists. How can a bank possess no reserves in its vaults, since the withdrawal of any amount of money (even by just one customer) will cause the bank to be bankrupt? The answer is that it is not a literal concept but a process. It is not such that tomorrow, every bank should get rid of all of its reserves, given a free market in money. What a monetarian advocates is not a state in which banks hold zero reserves but rather a process in which banks issue credit efficiently with regards to social time preferences and entrepreneurial profit discovery. In doing so, they thereby increase the faith of their customers that their promises and conduct will be completely dependable to such a degree that depositors will have no reason to attempt to acquire their banks' reserves through redemption. Customers, businesses, manufacturers, corporations, and other market institutions will not only be eager but will likely prefer to use bank promissory notes instead of "money proper" because, just like money, the promissory notes are "backed" by faith in these institutions. It is in this sense that money never needs to be backed unless the institutions that produce it or distribute it are less than trustworthy.

Highlight (Geel) | Locatie 3715

> As confidence in banks and their promises rises, the desire to use and hold "quality" money falls and the desire to hold and use bank notes and deposits rises. The money regression theorem loses its importance (except for historical references) in this context and gives way to the money progression theorem. The money progression theorem shows the moment the chosen medium of exchange in society is no longer used as a medium of exchange while also pinpointing the moment that a specific bank's promises become money proper. Both occur simultaneously. The reserves are no longer required for commerce and are sold for their previous use as a commodity, and the bank thus reduces its reserve levels to zero. No customer will seek to redeem their banknotes or liabilities for gold, dollars, or whatever reserve medium the bank has chosen to hold in its vault. It should be clear, then, that the two prerequisites for zero-reserve banking are (1) that banks maintain monetary

> equilibrium in the aggregate and (2) that citizens become so trustworthy of the banks' conduct that they now view the banks' promises as the same as money, and therefore they no longer wish to hold or exchange money over bank notes.

Highlight (Geel) | Locatie 3723

> The banks lower their reserve ratios over time as the trust in them rises until they become so efficient that bank promises become money itself and the old money no longer is a medium of exchange. Unlike Mises's regression theorem, the progression theorem is forward-looking and based on expectations. Both stories dovetail nicely, however. In a barter system, goods are exchanged for goods. In a monetary system, money is exchanged for goods. In the moneysphere, promises—and occasionally money—are exchanged for goods. It is when promises serve fully as money that the Austrian view of money becomes obsolete. To be sure, zero-reserve banking is not a possibility, for we would at least have to observe monetary equilibrium for that to occur. This does not mean, however, that we should ignore this process. Monetarianism advocates that the end goal of any monetary regime is for banks to hold no reserves, as the trust in them by holders of their promises serves as the reserves. Should a bank begin to behave immorally by refusing to honor redemptions, or should it loan money to inefficient entrepreneurs with poor business plans, that trust will evaporate faster than the reserves in a fractional-reserve bank and it will become bankrupt. The money progression theorem is the basis for money's evolution and monetary theory in general.

Highlight (Geel) | Locatie 3733

> To summarize, as an economy matures from barter into a money-using system of commerce, production tends to become more capitalistic. To progress, then, the economy requires savings in the form of real resources such as land, labor, and natural resources as well as capital goods that combine these factors of production. This supply of resources is finite, and it only serves to expand production if it is not being used to create goods directly for consumption. The economy can thus be seen as an array of stages of production separated by time. Producing some goods for consumption takes longer than other goods. The more complex a particular production process, the more funding it requires since more capital, labor, and resources are required. If "real" money, such as gold, is the definitive medium of exchange for an economy, then its supply is either fixed or relatively inelastic.

Highlight (Geel) | Locatie 3739

> Previously, an important characteristic of money was that it was scarce and could not be created easily without considerable cost. However, now that production methods are improving and the stages of production in the capital structure require more funding, the adjustability of the money supply obtains even greater importance. Entrepreneurs and businesses demand more "loanable funds" to finance this increase in economic output. To be clear, it is not that the supply of money should increase in perpetuity. Instead, the supply of money should adjust and respond to changes in the demand for money due to the stickiness of prices and the need for investment.

Highlight (Geel) | Locatie 3760

> Due to the lack of supply of available monetary savings, the deferred exchanges that do occur have higher interest rates than would otherwise be the case because the increase in the demand to borrow rises exponentially

> as an economy becomes more complex and capitalistic. The higher interest rates not only inhibit economic growth but also make recessions more likely when changes in the demand for money are not anticipated. Furthermore, since banks are not available to increase credit to these eager and credit-worthy entrepreneurs, the latter will attempt to economize on money and seek other competing, or potential, mediums of exchange. This creates a dilemma, unfortunately.

Highlight (Geel) | Locatie 3840

> To be sure, a bank operating with zero reserves in a free-banking system is permissible but incredibly risky. Should the bank increase the supply of credit even slightly beyond what it should relative to the savings and withdrawal rates of depositors, it will instantly be bankrupt. Thus, it is prudent for banks to hold at least some reserves. There are historical examples of fractional-reserve banks holding as little as 1 to 3 percent reserves. The profitability of issuing loans rises as the reserve ratio is lowered, but the risks that banks run, and therefore bankruptcy, rises too. Hence, banks have a subjective opportunity cost between monetary profits and monetary loss. The point where these two meet is precisely the ratio White mentioned between desired holdings of specie relative to promissory bank notes and actual holdings.

Highlight (Geel) | Locatie 3847

> Many Austrians will deny the validity of this analysis, citing the boom-bust cycle as proof that fractional-reserve banking inherently causes this economic problem, but the monetarian advocates for zero-reserve free-banking banking, not fractional reserves. Monetarianism desires (1) a society where trust is paramount, and the lower the amount of reserves banks hold, the higher the trust in those banks by the public is, and (2) an economy that maintains intertemporal coordination by achieving monetary equilibrium, or at least by largely preventing monetary disequilibrium. Monetarianism adheres to the pure theory of money, and this incorporates the money progression theorem and zero-reserve banking as well as the Austrian story of the origin of money and its purchasing power. Austrian monetary theory can tell us where we have been, but monetarianism can tell us where we are going. The monetarian realizes that a pure theory of money entails the voluntary abolition of money in favor of substitutes like bank promises that serve equally as money in the minds of a trusting public.

Highlight (Geel) | Locatie 3920

> other words, we cannot measure capital; we can only make educated guesses about it in value terms because we cannot collectively input subjective value to the factors of production and thus capital. The market monetarists, and the free bankers by proxy, are attempting to measure the economy's output as a whole without taking into account (1) the time horizon of changes in investment and inventories, that may or may not be counted in the GDP numbers used by policy makers and (2) the subjective valuations of individuals who transact in in intermediate goods and financial assets that are not inherently counted in Q, thus preventing monetary equilibrium from being achieved. To repeat the monetarian maxim: Money matters, but it is capital that counts.

Highlight (Geel) | Locatie 4014

> The Austrians understand the benefits of supply-side deflation stemming from increases in productivity and output through improvements in technology and capital accumulation. However, most of them view demand-

side deflation only through the lens of their story of the boom-bust cycle. Deflation plays merely a subsidiary role, particularly after the bust has occurred. This “secondary deflation” is the result of people choosing to increase their cash balances due to uncertainty and falling prices, and this likely explains why deflation is a secondary concern, at best, to Austrians. In truth, they see deflation through increases in desired cash balances as beneficial or at least neutral to real economic variables. In fact, Rothbard claimed that “there can be no business cycle in the purely free market.” By definition, then, economic downturns are only possible if there is a previous and unsustainable boom, and this boom can only be created and perpetuated by government or central bank intervention. And since an unsustainable boom is inherently inflationary, it follows that the Austrians do not view deflation as the cause of recessions.

Highlight (Geel) | Locatie 4103

Austrians commonly categorize free bankers, and essentially all non-Austrians, as Keynesians because they believe both perspectives fear falling prices will further reduce consumption spending since individuals will wait even longer if they believe prices will fall further in the future. This is a strawman argument; free bankers and monetarians do encourage prices and wage rates to fall during a recession, but both realize that many prices will not do so in the short run. The Austrians often attempt to avoid blaming the free market for any inefficiencies or issues. For example,

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Highlight (Geel) | Locatie 4198

But recall that many prices do not adjust right away, and their adjustment is almost never in lockstep with one another. Since prices held above their market-clearing levels result in surpluses of the respected goods, we can say that if individuals hold their wages and selling prices above their market-clearing levels during a time when the demand for money is rising and nominal income is falling, then unemployment will rise and forced investment will occur. As an aside, it should be clear that the use of the word “forced” in this case does not mean involuntary or with violence. It simply means that capital goods accumulate in inventories when their intended use (by their owners) was to mature into consumer goods, a concept we have elaborated on elsewhere.

Highlight (Geel) | Locatie 4324

In other words, an increase in monetary savings equals real savings in capital goods and labor, but the higher stages of production are not able to acquire these resources since interest rates do not reflect the time preferences of consumers, and thus borrowing to purchase these capital goods is rendered more difficult or impossible, at least in the short run. This situation is the mirror version of Austrian business cycle theory. The market rate of interest is above rather than below the rate of interest that would occur if the increase in savings were made available for investment in the capital structure. In the boom-bust story, investment runs ahead of savings, creating malinvestment. In the deflationary monetary disequilibrium story, savings runs ahead of investment in the capital structure, creating capital decumulation.

Highlight (Geel) | Locatie 4334

Unanticipated deflation stemming from sudden increases in the demand for money will cause lower output, higher unemployment, forced investment in unplanned inventories of goods, and capital consumption and

> decumulation. We recall Rothbard explaining correctly that the only way a society rises from a primitive level is to increase capital investment. Thus, if society is hampered by periodic short-run recessions, then capital investment and wealth accumulation is severely hindered in the long run. Workers are regularly laid off and lose income, restricting their ability to save and invest for the future. Entrepreneurs are unable to expand output and their enterprises in general, and thus the economy is unable to grow by increasing the real supply of consumer goods and real wages over longer periods of time.

Highlight (Geel) | Locatie 4494

> An increase in the demand for money is, ceteris paribus, similar to bond purchases. If an individual purchases a bond, he is deferring consumption spending to the future. If that individual increases his demand for money, it is the same result. Rothbard argues that an increase in the demand for money does not necessarily constitute an increase in savings. He

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Highlight (Geel) | Locatie 4510

> If an individual receives his weekly paycheck for $611.13 and he decides to increase his cash balances by that amount, then it is mathematically impossible to divide it into two equal amounts. Either investment spending or consumption spending would be reduced by $305.56, and the other would be reduced by $305.57. In this case, as in many others, a change in the demand for money is inherently not time preference neutral. The outcome will most likely be the same if the paycheck amounts to an even $611.00. What are the chances that he will divide his increase in his demand for money by exactly $305.50 so that his time preference has not changed? It can be asserted that at least a significant portion of the time, individuals will not divide their increase in the demand for cash balances equally between investment and consumption spending. Often enough, an increase in the demand for money will constitute an increase in savings.

Highlight (Geel) | Locatie 4584

> A fractional-reserve bank must acknowledge the opportunity cost in keeping “excess” reserves relative to the proper reserve ratio based on consumer withdrawal rates versus the cost of liquidity risk by issuing “too much” credit. Austrians believe that creating money through credit issuance is virtually costless in purely monetary terms, but this ignores subjective factors that, superficially, might seem the same.

Highlight (Geel) | Locatie 4595

> Cost is inherently subjective, and prospective costs influence choices before those choices are made. Thus, increasing the supply of bank money is not costless as many Ausrians assume, but rather it is based on the prospective trade-off between issuing too much credit (bank runs) and too little credit (foregone profits and market share). It is made based on anticipations of the future, and the anticipation of depositors redeeming a significant amount of the bank’s liabilities for its reserves poses a serious subjective cost on the decisions of the bank. Fractional-reserve banking has inherent limits for producing money, and these limits are fundamentally based on the subjective decisions of the bank’s customers. The customers, then, dictate what cost-induced policy the banks will choose.

Highlight (Geel) | Locatie 4605

> Full-reserve banking largely does not mitigate this intertemporal discoordination due to its inability to align its interest rates with the social rate of time preference. It can and does prevent bank runs, but it cannot provide the necessary credit intermediation that fractional-reserve free banking does and therefore cannot be said to prevent recessions. Those who believe that Austrian business cycle theory is the only explanation of fluctuations in capital goods industries are wrongly using the law of the instrument. Such a narrow view of monetary theory prevents the Austrians from appreciating the coherence of monetary disequilibrium theory as well as the boom-bust theory's role with its framework.

Highlight (Geel) | Locatie 4776

> Hayek's knowledge problem usually points to the difficulty of resource allocation by central planners, but it equally applies to market participants who may not have the requisite knowledge or incentive to analyze and dissect the meaning behind prices and their convergence or divergence from the equilibrium levels.

Highlight (Geel) | Locatie 4824

> While these economists have done interesting work on comparing Hayek's knowledge problem with Mises's calculation problem, the criticism of the former is quite ironic considering the flaws in their monetary theory are largely knowledge based at their core, as we have seen, for they do not take Rothbard's point seriously. They pay lip service to the voluntary nature of exchange in a free market but equate that to an optimal outcome at all times. Shackle has described similar kinds of economists as "detached observers." The action axiom misleads them into believing that all actions and the effects of those actions are preferable in the views of those market participants. This, however, is a dubious assumption at best. How do these economists know that the ex ante anticipations of individuals will align with the ex post satisfaction they desire in each and every scenario? How do they know that a specific array of free-market institutions will be superior to a different array if that free market is to be achieved? As Piquet (1978, p. 136) states:

Highlight (Geel) | Locatie 4953

> One is free to argue, whether rightly or wrongly, that a 100 percent reserve banking system is a more efficient monetary regime than any other. But it is ahistorical to claim that such a banking system is what society has chosen over the centuries. George Selgin (2018) has pointed out that fractional-reserve banking has been the historical rule and that the history of banks that kept all of their reserves on hand is smoke and mirrors. He states:

Highlight (Geel) | Locatie 5064

> This maternal instinct is misguided to some extent. It is true that markets have historically improved the productivity, capital accumulation, and real wealth of societies that have embraced them. Yet, the central planner mentality assumes too much; it emphasizes both the morality of voluntary exchange and the near-perfect knowledge of market participants. Furthermore, it assumes that the Austro-identitarian knows what is best for the acting individual as well as society as a whole within the free-market framework. But as we have explored, there can be instances where the central planner mentality does not coincide with the desires of the very market participants the Austro-identitarians claim to support under their libertarian maternalistic nature.